

WHAT IS CLAIMED IS:

1. A lighting device comprising an optic light guide for receiving light from a light source and propagating light therethrough via internal reflection, said light guide having a free end that emits directional light, and a sleeve surrounding said free end, said sleeve having an aperture spaced from the free end through which a beam of light passes.

2. The lighting device of claim 1 wherein said sleeve is movable in and out relative to said free end to vary the distance between said aperture and said free end to vary the size of the beam of light passing through said aperture.

3. The lighting device of claim 1 further comprising a lens covering said aperture to focus the beam of light passing through said aperture.

4. The lighting device of claim 1 wherein said light guide is flexible.

5. The lighting device of claim 1 further comprising a protective cover surrounding said light guide, said sleeve surrounding said protective cover.

6. The lighting device of claim 5 wherein there is an air interface between said protective cover and said light guide.

7. The lighting device of claim 5 wherein said protective cover has a closed end that covers said free end of said light guide.

8. The lighting device of claim 7 further comprising a connecting member attached to an other end of said light guide remote from said free end, said protective cover being sealed against said connecting member.

9. The lighting device of claim 1 further comprising a support member for supporting said light guide.

5 10. The lighting device of claim 9 further comprising a connecting member attached to an other end of said light guide remote from said free end, said support member being integral with said connecting member.

10 11. The lighting device of claim 9 wherein said support member is shaped to fit a particular application.

15 12. The lighting device of claim 11 wherein said support member is used to attach said lighting device to a patient.

13. The lighting device of claim 11 wherein said support member is used to attach said lighting device to a surgical instrument.

20 14. The lighting device of claim 1 wherein said lighting device is a surgical lighting device.

15 20 15. The lighting device of claim 1 wherein said light guide is flexible, and a malleable member extends along a portion of said light guide, said malleable member being bendable to hold the shape of said portion of said light guide once arranged in a desired position.

25 25 16. A lighting device for illuminating a viewing area comprising a light distributor for receiving light from a light source and propagating light therethrough via internal reflection, a light emitter for receiving light propagated by the light distributor and emitting directional light from a free end of said light emitter, and a sleeve surrounding said free end of said light emitter, said sleeve having an aperture spaced from said free end through which the directional light from said free end is beamed.

17. The device of claim 16 wherein said sleeve is movable in and out relative to said free end of said light emitter to vary the size of a beam of light passing through said aperture.

5 18. The lighting device of claim 17 further comprising a lens covering said aperture to focus the beam of light passing through said aperture.

10 19. The lighting device of claim 16 wherein said light emitter also emits diffuse light along a portion of the length of said light emitter.

15 20. The lighting device of claim 16 further comprising a protective cover surrounding said light emitter, said protective cover having a closed end covering said free end of said light emitter, and said sleeve surrounding said closed end of said protective cover.

20 21. The lighting device of claim 20 wherein there is an air interface between said protective cover and said light emitter.

22. The lighting device of claim 20 further comprising a connecting member attached to an end of said light distributor remote from said light emitter, said protective cover being sealed against said connecting member.

25 23. The lighting device of claim 20 wherein said light emitter and said protective cover are flexible.

24. The lighting device of claim 23 wherein said protective cover is made of a translucent or transparent material.

30 25. The lighting device of claim 16 further comprising a support member for supporting said lighting device.

26. The lighting device of claim 25 wherein said support member is shaped to fit a particular application.

27. The lighting device of claim 25 wherein said support member is
5 attached to an associated device.

28. The lighting device of claim 27 wherein said associated device comprises a surgical instrument.

10 29. The lighting device of claim 16 wherein said light emitter is flexible, and a malleable member extends along said light emitter, said malleable member being bendable to hold the shape of said light emitter once arranged in a desired position.

15 30. The lighting device of claim 29 further comprising a flexible protective cover surrounding said light emitter.

20 31. The lighting device of claim 30 wherein said malleable member is disposed within said protective cover, and said sleeve surrounds said protective cover.